

AW609: Tiltrotor Technology for Business Aviation

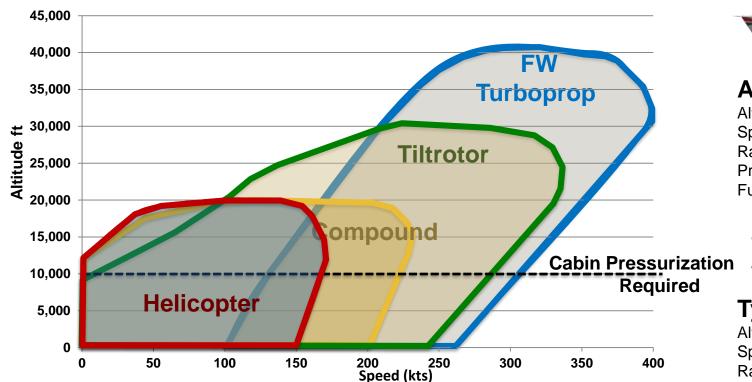
Wednesday October 11, 2017, 12:30PM

Bill Sunick, Leonardo Helicopters



AW609 Flight Envelope Advantage







AW609 TiltRotor

Altitude: 25,000 ft Speed: 275 kts

Range: 700 nm (std tank)

Pressurised cabin

Full Icing



Typical Helicopter

Altitude: 10,000 ft Speed: 140 kts Range: 360 nm

Tiltrotor technology enables true fixed wing cruise speeds and altitudes with VTOL performance.

Design Features

Airframe

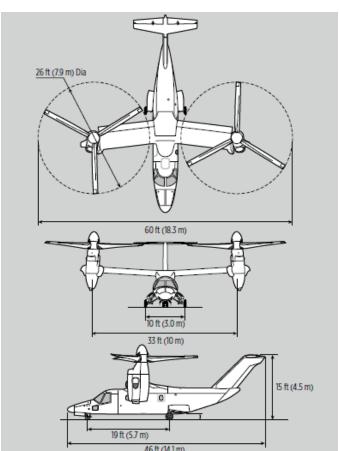
- Primarily Composite
- Pressurized Cabin
- Vapor Cycle Air Conditioning
- Rudderless

Power Plant

- 2 PWC PT6C-67A
- AEO Takeoff Power: 1,940 SHP
- OEI Power: 2,492 SHP, 30 sec

Hydraulic & Electrical

- •Triplex 3,000 psi Hydraulics
- •3 DC Generators & 28Ah Battery
- •2 PMGs & 2 FCC Batteries
- 2 AC Generators



NBAABACE

Rotor/Drive Systems

- Mechanically Interconnect Prop-Rotors
- Conversion via Dual Telescopic Ballscrews

Avionics/Flight Controls

- FCS Triplex Digital Full Authority FBW
- Rockwell Collins Fusion Avionics

Ice Protection

- Rotor Anti-ice/De-ice
- Wing & Engine Inlet De-ice Boots
- Heated Windshield

Fuel System

- 2,571 lbs in 10 Crashworthy Fuel Cells
- Aux External Tanks (~900lb)

4

Performance



- MTOW: 18,000 lbs/8,000 kg
- Max Useful Load: 6,300 lbs/2,860 kg
- Accommodation: 2 crew & 9 pax
- Max Cruise Speed: 275 kts
- HOGE ISA: 6,000 ft
- HIGE ISA: 10,000 ft
- Ceiling: 25,000 ft



Max Range (dry tank): 700nm (approx 1,000nm w/ aux fuel)

VIP/Corporate Configuration







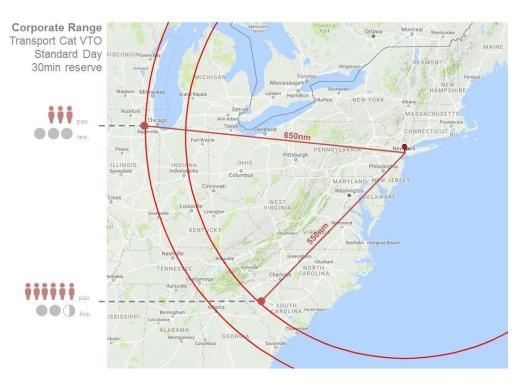


Point to point transit in pressurized comfort above the weather.

Range from NYC Heliport











Configurations

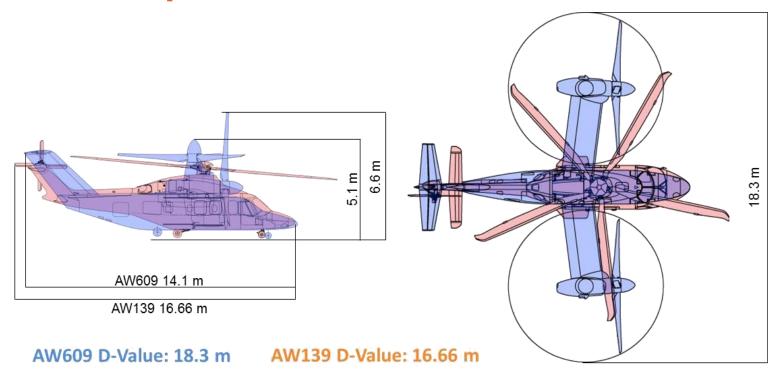


VIP Offshore SAR/EMS



AW139 Comparison

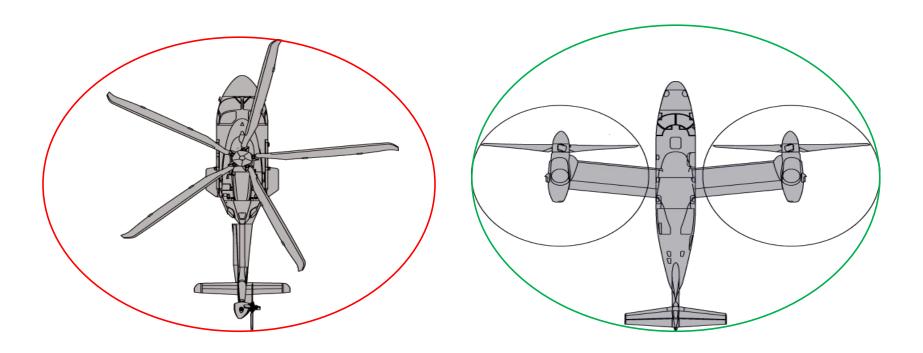




AW609 is approximately 10% larger than AW139; Smaller than S-92

Size Comparison





Spotting factor within 10% between S-92/AW189 and AW609